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SERIAL NO.: 09/630,517

APPLICANT: Bernard, et al.

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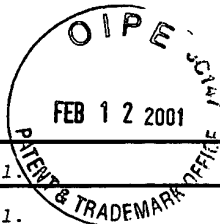
FILING DATE: August 2, 2000

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U.S. PATENT DOCUMENTS

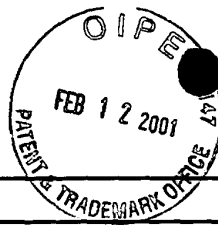
EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
KIWL	AA	6,120,860	09/19/00	Bowen et al.			
	AB	6,117,541	09/12/00	Frisk			
	AC	6,084,019	07/04/00	Matayabas, Jr. et al.			
	AD	6,071,988	06/06/00	Barbee et al.			
	AE	6,060,549	05/09/00	Li et al.			
	AF	6,050,509	04/18/00	Clarey et al.			
	AG	6,034,163	03/07/00	Barbee et al.			
	AH	6,017,632	01/25/00	Pinnavaia et al.			
	AI	5,993,769	11/30/99	Pinnavaia et al.			
	AJ	5,952,093	09/14/99	Nichols et al.			
	AK	5,942,320	08/24/99	Miyake et al.			
	AL	5,882,751	03/16/99	Occhiello et al.			
	AM	5,830,544	11/03/98	Kerscher et al.			
	AN	5,807,630	09/15/98	Christie et al.			
	AO	5,780,376	07/14/98	Gonzales et al.			
	AP	5,747,560	05/05/98	Christiani et al.			
	AQ	5,728,764	03/17/98	Bauer et al.			
	AR	5,665,454	09/09/97	Hosoi et al.			
	AS	5,660,761	08/26/97	Katsumoto et al.			
	AT	5,648,159	07/15/97	Sato			
	AU	5,620,774	04/15/97	Etchu et al.			
	AV	5,612,138	03/18/97	Kurz et al.			
	AW	5,578,672	11/26/96	Beall et al.			
	AX	5,552,469	09/03/96	Beall et al.			
	AY	5,530,052	06/25/96	Takekoshi et al.			
	AZ	5,523,045	06/04/96	Kudert et al.			
	BA	5,514,734	05/07/96	Maxfield et al.			
	BB	5,434,000	07/18/95	Konagaya et al.			
	BC	5,429,999	07/04/95	Naé et al.			
	BD	5,414,042	05/09/95	Yasue et al.			
KIWL	BE	5,385,776	01/31/95	Maxfield et al.			

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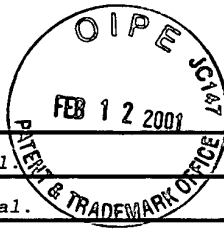
KIWL	BF	5,382,650	01/17/95	Kasowski et al.			
	BG	5,374,306	12/20/94	Schlegel et al.			
	BH	5,340,884	08/23/94	Mills et al.			
	BI	5,336,647	08/09/94	Naé et al.			
	BJ	5,334,241	08/02/94	Jordan			
	BK	5,314,987	05/24/94	Kim et al.			
	BL	5,273,706	12/28/93	Laughner			
	BM	5,248,720	09/28/93	Deguchi et al.			
	BN	5,221,507	06/22/93	Beck et al.			
	BO	5,206,284	04/27/93	Fukui et al.			
	BP	5,164,460	11/17/92	Yano et al.			
	BQ	5,164,440	11/17/92	Deguchi et al.			
	BR	5,153,062	10/06/92	Grolig et al.			
	BS	5,153,061	10/06/92	Cavagna et al.			
	BT	5,149,485	09/22/92	Belcher			
	BU	5,110,501	05/05/92	Knudson Jr. et al.			
	BV	5,102,948	04/07/92	Deguchi et al.			
	BW	5,091,462	02/25/92	Fukui et al.			
	BX	5,037,285	08/06/91	Kudert et al.			
	BY	5,034,252	07/23/91	Nilsson et al.			
	BZ	5,028,462	07/02/91	Matlack et al.			
	CA	4,994,313	02/19/91	Shimizu et al.			
	CB	4,983,719	01/08/91	Fox et al.			
	CC	4,983,432	01/08/91	Bissot			
	CD	4,957,980	09/18/90	Kobayashi et al.			
	CE	4,946,365	08/07/90	Kudert et al.			
	CF	4,894,411	01/16/90	Okada et al.			
	CG	4,889,885	12/26/89	Usuki et al.			
	CH	4,810,734	03/07/89	Kawasumi et al.			
	CI	4,777,206	10/11/88	Rittler			
	CJ	4,769,078	09/06/88	Tso			
	CK	4,742,098	05/03/88	Finlayson et al.			
	CL	4,739,007	04/19/88	Okada et al.			
	CM	4,725,466	02/16/88	Crass et al.			
	CN	4,720,420	01/19/88	Crass, et al.			
	CO	4,680,208	07/14/87	Aoki et al.			
	CP	4,677,158	06/30/87	Tso et al.			
	CQ	4,676,929	06/30/87	Rittler			
	CR	4,646,925	03/03/87	Nohara			
KIWL	CS	4,600,409	07/15/86	Campbell			

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<i>KW</i>	CT	4,595,715	06/17/86	Kuze et al.			
	CU	4,546,126	10/08/85	Breitenfellner et al.			
	CV	4,536,425	08/20/85	Hekal			
	CW	4,517,112	05/14/85	Mardis et al.			
	CX	4,482,695	11/13/84	Barbee et al.			
	CY	4,472,538	09/18/84	Kamigaito et al.			
	CZ	4,450,095	05/22/84	Finlayson			
	DA	4,442,163	04/10/84	Kühner et al.			
	DB	4,434,076	02/28/84	Mardis et al.			
	DC	4,434,075	02/28/84	Mardis et al.			
	DD	4,429,079	01/31/84	Shibata et al.			
	DE	4,412,018	10/25/83	Finlayson et al.			
	DF	4,410,364	10/18/83	Finlayson et al.			
	DG	4,398,642	08/16/83	Okudaria et al.			
	DH	4,393,007	07/12/83	Priester et al.			
	DI	4,391,637	07/05/83	Mardis et al.			
	DJ	4,239,826	12/16/80	Knott, II et al.			
	DK	4,219,527	08/26/80	Edelman et al.			
	DL	4,208,218	06/17/80	Finlayson			
	DM	4,163,002	07/31/79	Pohl et al.			
	DN	4,161,578	07/17/79	Herron			
	DO	4,133,802	01/09/79	Hachiboshi et al.			
	DP	4,116,866	09/26/78	Finlayson			
	DQ	4,105,578	08/08/78	Finlayson et al.			
	DR	4,081,496	03/28/78	Finlayson			
	DS	4,071,503	01/31/78	Thomas et al.			
	DT	4,064,112	12/20/77	Rothe et al.			
	DU	4,018,746	04/19/77	Brinkmann et al.			
	DV	3,946,089	03/23/76	Furukawa et al.			
	DW	3,876,552	04/08/75	Moynihan			
	DX	3,849,406	11/19/74	Basel, et al.			
	DY	3,843,479	10/22/74	Matsunami et al.			
	DZ	3,823,169	07/09/74	Staub			
	EA	3,792,969	02/19/74	Gertisser			
	EB	3,700,398	10/24/72	Cole, Jr.			
	EC	3,646,072	02/29/72	Shaw			
	ED	3,627,625	12/14/71	Jarrett			
	EE	3,544,523	12/01/70	Maxion			
<i>KW</i>	EF	3,514,498	05/26/70	Okazaki et al.			
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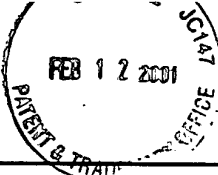


KIW	EH	3,391,164	07/02/68	Straley et al.		
	EI	3,281,434	10/25/66	Turetzky et al.		
	EJ	3,232,934	02/01/66	Hoare		
	EK	3,125,586	03/17/64	Katz et al.		
	EL	3,076,821	02/05/63	Hoare		
	EM	2,966,506	12/27/60	Jordan		
	EN	2,957,010	10/18/60	Straley et al.		
	EO	2,938,914	05/31/60	Joyce		
	EP	2,924,609	02/09/60	Joyce		
	EQ	2,737,517	03/06/56	Boyd		
KIW	ER	2,531,427	11/28/50	Hauser		

FOREIGN PATENT DOCUMENTS

KIM	ES	EP 940430	09/08/99	Europe		
	ET	WO 99/15432	04/01/99	PCT		
	EU	WO 99/41299	08/19/99	PCT		
	EV	WO 99/02593	01/21/99	PCT		
	EW	WO 98/53000	11/26/98	PCT		
	EX	WO 98/29499	07/09/98	PCT		
	EY	JP 10168305	06/23/98	Japan (abstract)		
	EZ	EP 0846723	06/10/98	Europe		
	FA	JP 10133013	05/22/98	Japan (abstract)		
	FB	JP 10077427	03/24/98	Japan (abstract)		
	FC	WO 98/01346	01/15/98	PCT		
	FD	JP 10001608	01/06/98	Japan (abstract)		
	FE	WO 97/44384	11/27/97	PCT		
	FF	WO 97/31973	09/04/97	PCT		
	FG	WO 97/31057	08/28/97	PCT		
	FH	WO 97/30950	08/28/97	PCT		
	FI	JP 9217012	08/19/97	Japan (abstract)		
	FJ	JP 9176461	07/08/97	Japan		
	FK	EP 780340	06/25/97	Europe		
	FL	WO 97/17398	05/15/97	PCT		
	FM	EP 0761739	03/12/97	Europe		
	FN	JP 09048908	02/18/97	Japan (abstract)		
	FO	EP 747451	12/11/96	Europe		
	FP	EP 681990	11/15/96	Europe		
	FQ	WO 96/25458	08/22/96	PCT		
	FR	WO 96/08526	03/21/96	PCT		
	FS	EP 0691376	01/10/96	Europe		
KIM	FT	EP 0691212	01/10/96	Europe		

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KLM	FU	WO 95/14733	06/01/95	PCT			
	FV	EP 650994	05/03/95	Europe			
	FW	WO 95/06090	03/02/95	PCT			
	FX	JP 7026123	01/27/95	Japan (abstract)			
	FY	WO 94/29378	12/22/94	PCT			
	FZ	WO 94/11430	05/26/94	PCT			
	GA	EP 0590263	04/06/94	Europe			
	GB	WO 93/14922	08/05/93	PCT			
	GC	WO 93/11190	06/10/93	PCT			
	GD	EP 542266	05/19/93	Europe			
	GE	WO 93/04125	03/04/93	PCT			
	GF	WO 93/04118	03/04/93	PCT			
	GG	WO 93/04117	03/04/93	PCT			
	GH	EP 459472	12/04/91	Europe			
	GI	EP 398551	11/22/90	Europe			
	GJ	EP 295336	12/21/88	Europe			
	GK	DE 3808623	10/06/88	Germany (abstract)			
	GL	DE 3806548	09/15/88	Germany (abstract)			
	GM	EP 278403	08/17/88	Europe			
	GN	EP 261430	03/30/88	Europe			
	GO	JP 62073943	04/04/87	Japan (abstract)			
	GP	EP 0202532	11/26/86	Europe (abstract)			
	GQ	EP 186456	07/02/86	Europe			
	GR	WO 84/03096	08/16/84	PCT			
	GS	GB 2123014	01/25/84	United Kingdom			
	GT	JP 76029697	03/09/76	Japan (abstract)			
	GU	JP 75010196	04/18/75	Japan (abstract)			
	GV	JP 75005751	03/06/75	Japan (abstract)			
	GW	JP 75005735	03/06/75	Japan (abstract)			
	GX	JP 75001156	01/16/75	Japan (abstract)			
KLM	GY	GB 1090036	11/08/67	United Kingdom			

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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

KLM	GZ	LeBaron et al., "Polymer-layered silicate nanocomposites: an overview," <i>App. Clay Sci.</i> , <u>15</u> , 11-29 (1999)
	HA	Ke et al., "Crystallization, Properties, and Crystal and Nanoscale Morphology of PET-Clay Nanocomposites," <i>J. Appl. Polym. Sci.</i> , <u>71</u> , 1139-1146 (1999)
	HB	Kawasumi et al., "Preparation and Mechanical Properties of Polypropylene-Clay Hybrids," <i>Macromolecules</i> , <u>30</u> , 6333-6338 (1997)
	HC	Usuki et al., "Synthesis of Propylene-Clay Hybrid", <i>J. Appl. Polym. Sci.</i> , <u>63</u> , 137-139 (1997)
	HD	Giannelis, "Polymer Layered Silicate Nanocomposites," <i>Advanced Materials</i> , <u>8</u> , 29-35 (1996)
KLM	HE	Kurowaka et al., "Preparation of a nanocomposite of polypropylene and smectite," <i>J. Materials Science Letters</i> , <u>15</u> , 1481-1483 (1996)

FEB 12 2001

KHL	HF	Oriakhi et al., "Incorporation of poly(acrylic acid), poly(vinylsulfonate) and poly(styrene sulfonate) within layered double hydroxides," <i>J. Mater. Chem.</i> , 6 , 103-107 (1996)
	HG	Messersmith et al., "Syntheses and Barrier Properties of Poly(ϵ -Caprolactone)-Layered Silicate Nanocomposites," <i>J. of Polym. Sci.</i> , 33 , 1047-1057 (1995)
	HH	Pinnavaia et al., "Clay-Reinforced Epoxy Nanocomposites," <i>Chem. Mater.</i> , 6 , 2216-2219 (1994)
	HI	Sugahara et al., "Clay-Organic Nano-Composite; Preparation of a Kaolinite - Poly(vinylpyrrolidone) intercalation Compound," <i>J. Ceramic Society of Japan</i> , 100 , 413-416 (1992)
	HJ	Yano et al., "Synthesis and properties of polyimide-clay hybrid," <i>ACS, Polymer Preprints</i> , 32 , 65-66, (1991)
	HK	Fukushima et al., "Swelling Behavior of Montmorillonite by Poly-6-Amide," <i>Clay Minerals</i> , 23 , 27-34 (1988)
	HL	Verbicky, <i>Encyclopedia of Polymer Science and Engineering</i> , 2nd Edition, 12 , 364-383 (1988)
	HM	Fukushima et al., "Synthesis of an Intercalated Compound of Montmorillonite and 6-Polyamide," <i>J. Inclusion Phenomena</i> , 5 , 473-482, (1987)
	HN	Okada et al., "Synthesis and Characterization of a Nylon 6-Clay Hybrid," <i>ACS, Polymer Preprints</i> , 28 , 447-448, (1987)
	HO	Fahn et al., "Reaction Products of Organic Dye Molecules with Acid-Treated Montmorillonite," <i>Clay Minerals</i> , 18 , 447-458 (1983)
KHL	HP	Greenland, "Adsorption of Polyvinyl Alcohols by Montmorillonite," <i>J. Colloid Sci.</i> , 18 , 647-664 (1963)
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